UNITED NATIONS

ECONOMIC
AND
SOCIAL COUNCIL

Distr.
LIMITED

E/ECA/PSD.3/38
9 December 1983

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Third Session of the Joint Conference
of the African Planners, Statisticians and
Demographers

Addis Ababa, 5-14 March, 1984

The Evolution of Population Theories and Policies in Development Planning

TABLE OF CONTENTS

		Paragraph
1.	Introduction	1-3
2.	Population theories which influenced population policies in Africa	4-23
3.	Future orientations and new policy initiatives	24-28

The Evolution of Population Theories and Policies in Development Planning

1. Introduction

1. The basic assumption among population scholars that all nations in the modern world which have moved from a traditional agrarian-based economic system to a predominantly industrial urbanized base have also moved from a condition of high mortality and fertility to low mortality and fertility, can be traced to the concern of Malthus for the future of human populations. Malthus and many others after him believed that the numbers of human beings would always increase up to a level set by the available food supply or by enemies and diseases. Consequently, many have asserted that uncontrolled population growth in the earth's poor countries is leading to catastrophie. A different school of thought has developed over the years which argues that the world has enough resources to cater for its population up to the end of this century and stresses that all will depend on the improvement of social and economic institutions and growth of co-operation and interdependence. Some have gone further to argue that rapid population growth has almost equalled economic growth but that high dependency and other problems associated with the former growth are due to increasing unequal distribution of income 1/.

2. The continuing debate on the economic consequences of rapid population has tended to gravitate into two poles of emphasis. One of these focused on crises, systematic disasters, famine, depletion of natural resources, ecological threats linked to population growth - has adhered to the conclusions of Malthus on the ultimate catastrophe awaiting continuous growth in population. A second pole of empahsis concentrates on the inter-relationships between demographic and economic trends.

3. This debate has over the centuries been influenced by religious, political and cultural beliefs the significance of which one can identify in population policies and economic strategies adopted by different nations. In recent years interest in the relationship between economic development and population growth has given rise to evalution of analytical theories which tend to focus overwhelmingly on the fertility and mortality factors in the process of economic and social transformation. Poor economic performance during the last quarter of a century among African countries, increasing difficulties of food supply, the persistence of high mortality and fertility and the growing difficulties of generating more employment have led to renewed interest in this debate. This paper attempts to examine the evolution of population theories and policies which have influenced development planning in the region. It uses a selected number of population

---

1/ Study committee of the office of the Foreign Secretary, National Academy of Sciences, Rapid Population Growth, Vol. II. John Hopkins Press, Baltimore 1971.

policy instruments to demonstrate how original policies have been revised, abandoned or reversed as countries have used improved demographic data on their populations to assess their socio-economic development strategies and policies. It examines the extent to which the global debate on economic-demographic interrelationships have influenced the orientation of planners in the region. It also identified continuing contradictions in some policies in the region and suggests an empirical approach to formulating population policies aimed at rationalizing economic and social development strategies.

2. Population theories which have influenced population policies in Africa

4. The majority of African countries embarked on national economic and social development planning at a time when the "demographic" transition theory as a definite statement of theory was being subjected to a complete metamorphosis by some of its authors at the Princeton Office of Population Research under Frank W. Notestein 1/. The theory which specifies the relationship between socio-economic change and demographic change was first universalized by Kirk in 1944. He considered fertility decline and a regime of low vital rates as the demographic consequences of experiencing industrialization. This original social scientific perspective had produced an explanation of fertility decline and fertility level that emphasized how greatly reproductive behaviour was determined by social and structural factors. Thus transition theorists saw fertility as a dependent variable and argued that the fertility level of any society could be understood by analysing the components of its social system. The theory viewed all demographic trends as responses to structural changes labelled "the modernization process".

5. However, by the mid-1950s such scholars as Notestein and Davis had switched the theory round and made fertility an independent variable in their analysis of population dynamics in non-industrialized countries. Notestein, for example, came to consider population growth itself as a stumbling block to economic development and a cause of continuous underdevelopment. Similarly, Kingsley Davis, who in 1945 argued that "the Asiatic peoples, and others as well, will acquire modern civilization in time to check their fertility and thus achieve effective demographic balance" 1/ was by 1951 describing population growth in the Indian Subcontinent as "a Frankenstein" and was arguing two years later that "there was no inherent reason why peasant, agrarian populations cannot adopt the customs of fertility control, in advance of and to the advantage of modern economic development" 2/. Both scholars had by then switched completely to a new policy-oriented approach which viewed fertility as an independent variable that had to be altered rather than a dependent varisble that reacted to changing socio-economic conditions.

1/ Kingsley Davis, "The World Demographic Transition", in The Annals of the American Academy of Political and Social Sciences, 237 January, 1945, p. 10.

2/ D. Hodgson. "Demography as a Social Science and Policy Science", in Population and Development Review, Vol. 9, No. 1, March, 1983.

6. By the time demographers turned attention to African countries two policies were most commonly advocated for reducing rapid population growth in poor countries. The first emphasized rapid economic growth as a means of creating the desire for fewer children. It was based on the assertion that the onset of a broad fertility decline was associated with the exposure of a substantial fraction of the population to modern systems of social, economic and value organizations. This postulation which had extensive antecedents in the original "transition" theory and in the "threshold hypothesis" fitted the political philosophical and ideological orientations of the anticolonial stance of a majority of newly independent African States. This policy orientation had lost some of its original advocates to a second theory that recommended more effective national family planning programmes, the absence of which its protagonists saw as "a major cause of the current high fertility level" of non-industrial countries 3/.

7. The issue of population policy in Africa came into general debate when advocates of the latter policy orientation had used surveys of knowledge attitudes and practices with regard to family planning (KAP surveys) and simulation models to elaborate pessimistic and optimistic scenarios of future population in developing countries 4/. While a majority of Asian countries had become converted to family planning as a national policy instrument for reducing fertility levels, the majority of African countries were not convinced of the improvement in percapita income which Coale and Hoover suggested could be realised if birth rates fell. It was, therefore, no wonder that the first attempts by Western demographers to shift the debate from a strictly social scientific stance to an explicitly policy-oriented one which identified population growth as hindering economic and social transformation were not accepted by a majority of African countries as a justification for launching a national family planning programmes.

8. During the 1960s and 1970s, demographers - particularly American demographers - used simulation models extensively to demonstrate that improvements in percapita income could only be realized if birth rates fell 5/. The general hypothesis put forward suggested that a significant feature of rapid population growth as such was that the higher the rate of population growth, the higher the level of needed investment to achieve a given percapita output. In this light, it was argued that saving was negatively related to family size. Thus, as income rises people buy more food and will have fewer babies.

3/ Dennis Hodgson, Ibid. p. 22.

4/ Bernard Berelson, ed. Family Planning and Population Programmes, University of Chicago Press, Chicago, 1969; Ansley Coale and Edgar Hoover, Population Growth and Economic Development in Low-income countries, Princeton University Press, Princeton 1958.

5/ R. G. Ridker ed., Population and Development, John Hopkins University Press, Baltimore, USA, 1970.

D. M. Heer, Society and Population, Prentic Hall Inc., Englewood Cliffs, New Jersey, 1968.

Robert Repetto, Economic Equality and Fertility in Developing countries John Hopkins University Press, Baltimore, 1979.

National Academy of Science, Rapid Population Growth, Vol. I-II, John Hopkins University Press, Baltimore, 1971.

9. The African continent was invaded by family planners a majority of whom understood little about the fertility income interrelationships but who advocated population control. This "invasion" brought about a general reaction in most countries prompting many to concluded that it was neo-colonial attempt to prevent Africa from increasing its population to draw the benefits of economics of scale.

10. The emphasis on rapid population growth had focused so much attention on fertility change that population policy came to be identified with birth control and countries which had no explicit fertility regulation policies were simply classified as having no population policies. Thus, while African countries identified high mortality, morbidity, and spatial distribution as policy areas requiring urgent intervention, aid from donor countries focused principally on fertility studies related to intervention strategies for lowering current high fertility levels. This conflict of interest which was very evident during the World Population Conference in bucharest 1974 has continued unabated to date 1/.

11. The elevation of the rapid population growth factor to the most important determinant of economic modernization led Western aid donors - particularly the USA and the World Bank to encourage the adoption of a national family planning programme as a precondition for the provision of some aid. Countries in the region reacted in two distinct ways to the pressure to view high fertility as a major obstacle to development. One group of countries, stated clearly that they needed to increase the sizes of their populations to enlarge internal markets. Thus,in 1976 Gabon, Ivory Coast, Mozambique, Central African Republic, Equatorial Guinea and the United Republic of Cameroon all advocated a higher level of natural increase in their populations 2/. Among nine countries which considered their population growth rates too high, only four (Botswana, Swaziland, Ghana, Lesotho) indicated in a UN enquiry at the time that full intervention was appropriate for lowering natural increase in population. It was easy to conclude from Government replies to the Third Inquiry that many African countries had no views regarding the acceptability of rates of natural increase for reasons ranging from insufficient information to reasons described vaguely as "other than sufficient information" 3/.

12. The inability of most African countries to state their population policies in clearly catagorisable forms was nevertheless due to the poor state of knowledge of the demographic situation in these countries, a majority of which conducted their first national censuses only in the nineteen seventies. The failure of most countries in the region to be drawn easily into the "family planning before development" ideology of the new Western policy-oreinted perspective of producing a specific demographic change to avert a crisis was also due to their deep-rooted mistrust of the recommendations coming from countries which were

---

1/ United Nations Report of the United Nations World Population Conference 1974, Bucharest, 1974, UN Sales No. E. 75.X.III.3.
- World Bank, Rapid Population Growth in Subsaharan Africa, World Bank staff Working Papers, No. 559, Washington D.C., 1983.

2/ United Nations, World Population Trends and Policies, 1977 monitoring report Vol. II, ST/ESA/SER.A/62/Add. 1, N.Y., 1979, p. 104.

3/ UN, Ibid., p. 104

not as eager to assist purely economic development efforts as they were to fund family planning programmes.

13. The Fourth United Nations Population Inquiry among governments in 1978 and recent policy statements from African countries illustrate very significant changes in population policy orientation of countries in the region. The United Republic of Cameroon which as late as 1978 considered its population growth rate unduly low regarded it as too high in 1980 when the authorities were already describing the growth as the "spiral of uncontrolled runaway growth". Similarly, Algeria which in 1978 had regarded its growth rate as satisfactory currently considers it too high and the Central Committee of the National Liberation Front at its second regular session held in December 1979 adopted a resolution which recommended that "Activities aimed at health information and education and maternal and child protection, and the institution of a policy based on individual adherence, and consonant with our socio-cultural values, must be taken over developed and facilitated" 1/. That resolution went further to state that "the rate of growth of the population if maintained, would constitute a heavy burden on the economy ....". Rwanda and Zimbabwe have embarked on a policy of partial intervention with a view to lowering population growth rates and in Tanzania President Nyerere called for the formulation of a national birth policy and for launching a campaign to educate people on the need for adequate spacing of children 2/.

14. Countries that want lower growth rates have established goals for their population policy which specify targets to be attained within specific time periods 3/. These countries have however generated more comprehensive information on the characteristics and dynamics of their populations. There appears to be a correlation between improved demographic knowledge and the formation more comprehensive population policies in the region. Thus, countries such as Nigeria with no reliable population statistics at the macro level have no specific policies of influencing growth rates.

15. While improved demographic information has contributed to the formulation of population policies in African countries, the development of research in such areas as education, female employment, health impact of family planning and maternal and child nutrition have contributed significantly to stimulating interest for sectorial policies in these areas. The influence of such research is most evident in those countries with more comprehensive populations related to birth and death rates and population distribution.

1/ United Nations, Ibid., page 15.

2/ UNFPA, Population UNFPA Newsletter November 1982.

3/ Kenya wants to achieve an annual growth rate of 2.8 percent by 2000; Mauritius wants a gross reproduction rate of 1.12 during 1982-1987; Egypt wanted rate of natural increase of 1.06 percent by 1980; Tunisia is aiming at a growth rate of 1 percent by 2000, Lesotho wants a growth rate of 2 percent but the time period is not indicated and Ghana aims at a 1.8 percent growth rate by 2000.

16. Most commonly discussed, are the theories advanced by Caldwell. One of these theories argues that fertility behaviour in both high and low fertility communities is rational behaviour which is determined by social conditions - primarily by the direction of the intergenerational wealth flow. This flow, he contends is from younger to older generations in all traditional societies. He argues that unless this flow is reversed through what he calls a "Westernization" process which leads to an "emotional" and "economic" nucleation of the family, fertility is not likely to decline significantly. He also presents the general proposition that mass education (especially female education), shift in employment opportunities from family production to wage labour markets which enhance his "Westernization" process provide suitable grounds for fertility decline 1/. Although the general proposition is not dramatically different from the conventional concept of an economic price for a child which Leibenstein and Becker used to explain secular fertility decline, it nevertheless represents in part a choice for parents which the "market price" does not assume.

17. It also has far reaching policy implications which tend to re-enforce the sustenance and expansion of population policies which many governments in the African region have adhered to since independence. For example, Caldwell's advocacy of increased female education in the process of expanding mass education goes down well with national education plans in most countries of the region whether or not they aim for reduced fertility.

18. Although six countries (Central African Republic, Equatorial Guinea, Gabon, Guinea, Ivory Coast and the Libyan Arab Jamahiriya) consider their population growth rates to be too low, few policy instruments can be identified in most of these countries which sustain a high fertility policy. In some countries like the Ivory Coast, there is in fact an apparent contradiction in the country's policy. While national policy advocates the maintenance of a high growth rate, the provision of children's allowance to couples is limited to six children for a small percentage of parents in the modern economic sector.

19. In the field of mortality, the general theory that living conditions must improve all round seems to have been preceded by a period when curative medicine was believed to constitute the principal instrument of policy in this area. However, work by individual researchers and the World Health Organization has brought into the forefront a new orientation which emphasizes that preventive measures have greater long term impact on the global effort to reduce mortality and suffering. Although this new orientation has been accepted by all countries, policy makers in several African countries have continued to focus on the curative medicine which relies on expensive hospital structures. Gradually, emphasis and resources are shifting to preventive measures and it is evident that increasing resort to empirical analysis of causes of mortality as a basis for mortality reduction policies would bring preventive medicine into proper perspective in health planning.

1/ J. C. Caldwell, "Towards a restatement of demographic transition theory", population and Development Review, Volume 2, Nos. 3-4, September - December 1976, pp. 321-366. Theory of Fertility Decline, Academy Press, New York, 1982.

20. A careful examination of population policy instruments in African countries reveals individual country adherence to systems inherited from former colonial administrations and maintained by policy makers for a wide variety of reasons. The example of French-speaking countries presents a good example of the dichotomy between population policy and existing demographic phenomenon. The social security systems in these countries are centred on a family allowance programme which was started for the elite by the colonial administration in these countries. Its origins can be traced directly from pro-natalist legislation enacted in France during the seventeenth century and carried to its fullest after French military defeats in the Prussian War, first and Second World Wars when successive French governments resolved that the French birth rate should match that of Germany.

21. The extension of the system to colonial governments limited the allowance initially to persons considered as civil servants of equal rights with the metropolitan administration. At independence, the children's allowance scheme was maintained and again limited to civil servants. Although it has been extended in varying degrees to include staff in some selected sectors of the economy, it remains a regressive tax rebate system in which persons in the higher income echelons earn more than the low income groups.

22. While the system in the English-speaking countries laid less emphases initially on children's allowance, the overall development of the social security and welfare system has also been to the detriment of the lower income groups.

23. Similarly several countries have adopted policies to provide free universal education and medical care services prior to any systematic analysis of the impact of demographic, economic, logistic and other factors crucial for the successful implementation of such policies. Thus in the countries which adopted universal free primary education for example, no plans were made to effectively absorb the great majority of its products into secondary, technical, commercial schools. The result in most cases is widespread unemployment among children sometimes as young as thirteen. In the health sector, universal free medical care policies were adopted when the majority of the population had no physical access to a clinic, health centre or hospital and when the skeletal health manpower was totally inadequate to respond even to the existing demands of the population. In this case, the results in almost all the countries have been the absence of drugs, neglect of laundry and other sanitary services of health institutions and overcrowding in these institutions. In some cases, the unintended consequence has been the emergence of private clinics which several governments then attempt to close down. In general, it can be asserted that social legislation on the continent has reflected the ideological and developmental needs of European countries whose demographic problems have for a long time been very different from the population problems that predominate in African countries.

Future orientations and new policy initiatives

24. A review of the development plans of a majority of African countries shows that although recent plans increasingly refer to demographic factors in the analysis of development problems, few utilize demographic data in formulating policies and programmes. In fact as indicated earlier in this analysis, a majority of these countries are not antinatalist and even those that support family planning policies and programmes do so for health and human rights reasons 1/.

25. Among the reasons that contribute to ambivalent population policy considerations in Africa the following deserve special mention. The common and frequently repeated view that there are "empty spaces" to be filled gives most authorities the feeling that the nation has a long way to go before population problems set in. In many countries, religious, ethnic and cultural factors make population a politically sensitive subject to discuss and most authorities prefer to shelve it. Governments have been preoccupied with problems of nation building and increasing financial and economic difficulties tend to push population issues far into the background.

26. Although the practice in the recent past has been for conferences to call for greater attention to the interrelationships between population and development, it would be necessary for such recommendations and resolutions to be backed up by empirical research on these countries that demonstrate the central role of demographic variables in the development process. In this context, well-formulated and properly validated socio-economic demographic models are required to calculate the quantitative and qualitative importance of both the direct and indirect effects of changes as well as the relative costs and benefits of population policies.

27. Development planning is a mechanism for transforming development policies into a consistent design composed of instruments and quantified targets. If these policies view demographic variables as endogeneous and the goals of policy makers are translated into targets, planners can determine resource requirements for each goals and thus compare the costs and benefits associated with each. To do this, it becomes necessary not to rely on generalized theories but to formulate a model that defines the critical relationships between the means and the targets. In this exercise, greater dialogue between policy makers and planners is needed for model specifications, parameter estimation and model validation.

1/ World Bank, 1983, op. cit. p. 56.

28. In order to make the best use of population - development models, they should be properly validated prior to being used for planning and policy formulation. Sensitivity analysis can identify those portions of the model that have the greatest effect on system response and therefore require the most careful validation. However, the usefulness of models in socio-economic demographic policy and programme formulation will depend very much on the quality of data base available because it will determine the degree to which planners can trust projections derived from it. A weak empirical base for many key relationships between social economic and demographic variables constitutes an important factor limiting the use of population development models and making planners rely on theories which bear little relevance to the actual situation in the country concern. An improvement in the quality of demographic data at the macro and micro levels is essential for viable and comprehensive population - development policies.